

FIG. 1

```
graph TD; A[GRAPHICAL USER INTERFACE 200] --- B[IMAGE ENGINE 202]; B --- C[DATABASE 204]; C --- D[(DWG FILES 206)]; subgraph C [DATABASE 204]; E[2D DATABASE 210]; F[3D DATABASE 208]; end
```

The diagram illustrates the architecture of the Graphics Program 108. It consists of the following components and their interconnections:

- GRAPHICAL USER INTERFACE 200**: The top-level component that interacts with the user.
- IMAGE ENGINE 202**: Receives input from the GUI and processes it to generate images.
- DATABASE 204**: A central data repository that stores information used by the image engine. It is subdivided into:
  - 2D DATABASE 210**: Stores 2D data.
  - 3D DATABASE 208**: Stores 3D data.
- DWG FILES 206**: A storage component for drawing files, connected to the database.

The flow of data is as follows: The **GRAPHICAL USER INTERFACE 200** sends data to the **IMAGE ENGINE 202**. The **IMAGE ENGINE 202** interacts with the **DATABASE 204**, which in turn accesses **DWG FILES 206**. The database also contains internal **2D** and **3D** data stores.

FIG. 2

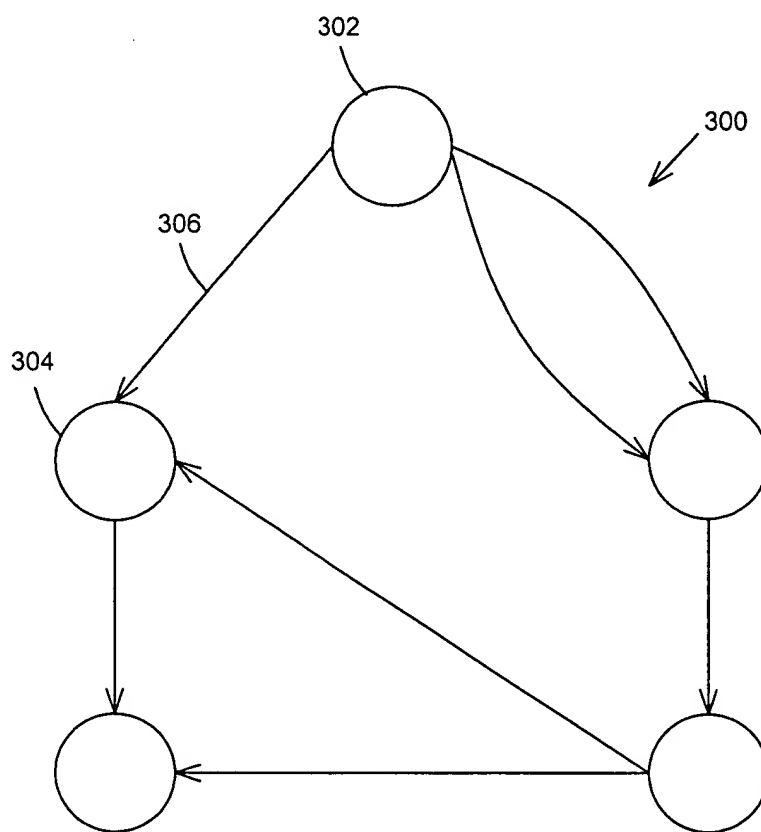
3D DATABASE  
208

FIG. 3

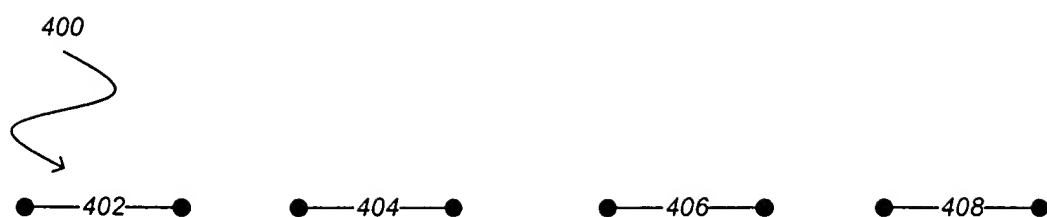


FIG. 4A

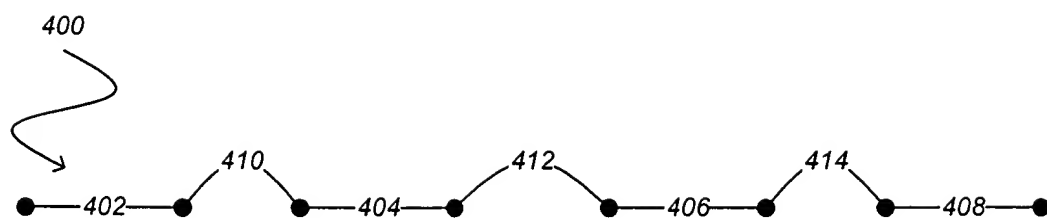


FIG. 4B

007090-8058580

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graph TD; 500{WAIT FOR EVENT} --> 502[IDENTIFY EVENT]; 502 --> 504[IDENTIFY CURRENT STATE]; 504 --> 506[DETERMINE NEW STATE]; 506 --> 508[TRANSITION TO NEW STATE AND PERFORM ACTIONS]; 508 --> 510[SET CURRENT STATE TO NEW STATE]; 510 --> 500;
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The flowchart illustrates a continuous loop for state transitions. It begins with a decision diamond labeled "WAIT FOR EVENT" (500). If an event occurs, the process moves to a rectangular box labeled "IDENTIFY EVENT" (502). This is followed by another rectangular box labeled "IDENTIFY CURRENT STATE" (504). The next step is a rectangular box labeled "DETERMINE NEW STATE" (506). This leads to a rectangular box labeled "TRANSITION TO NEW STATE AND PERFORM ACTIONS" (508). Finally, a rectangular box labeled "SET CURRENT STATE TO NEW STATE" (510) completes the loop, with an arrow returning to the "WAIT FOR EVENT" diamond.

FIG. 5

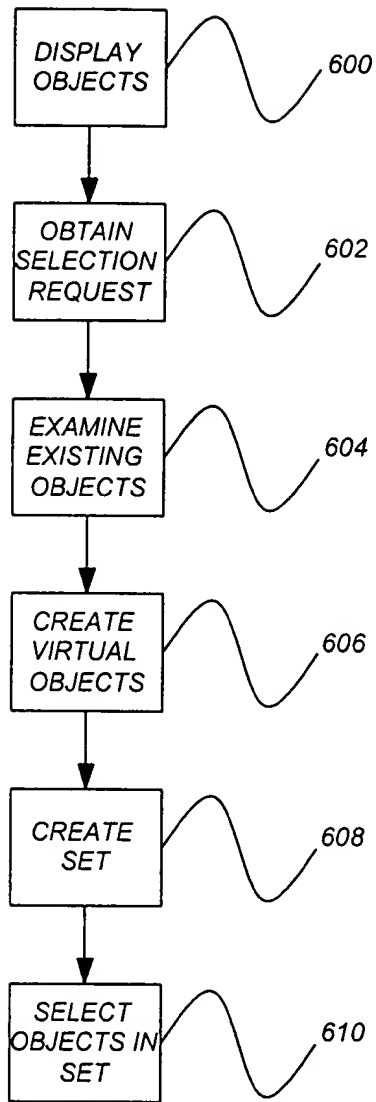


FIG. 6